



## **WATER SAMPLING AND REPORTING SERVICES**

**COLUMBIA PUBLIC SCHOOLS  
GENTRY MIDDLE SCHOOL  
4200 BETHEL STREET  
COLUMBIA, MISSOURI**

Prepared for:

**COLUMBIA PUBLIC SCHOOLS  
COLUMBIA, MISSOURI**

Prepared by:

**GEOTECHNOLOGY, LLC, DBA UES  
ST. LOUIS, MISSOURI**

Date:

**DECEMBER 21, 2024**

Project No.:

**J044517.01**

**SAFETY  
TEAMWORK  
RESPONSIVENESS  
INTEGRITY  
VALUE  
EXCELLENCE**



December 21, 2024

Mr. David Seamon  
District Project Manager  
Columbia Public Schools  
1818 West Worley Street  
Columbia, Missouri 65203

Re: Water Sampling and Reporting Services  
Columbia Public Schools  
Gentry Middle School  
4200 Bethel Street  
Columbia, Missouri  
Project No. J044517.01

Dear Mr. Seamon:

In accordance with Columbia Public Schools' (CPS) Request for Proposal No. C-24043, dated October 10, 2023, Geotechnology, LLC, dba UES, is pleased to provide this drinking water sampling report for the referenced project. Our scope of services included flushing and sampling of drinking water from potable water outlets, laboratory analysis of water samples, and a letter report.

#### **SITE AND PROJECT DESCRIPTION**

The subject property consists of the existing Columbia Public Schools Gentry Middle School, located southeast of the intersection of Bailey Drive and Bethel Street in Columbia, Missouri. The purpose of the drinking water sampling was to identify potable water outlets that may require remediation in accordance with the State of Missouri's *Get the Lead out of School Drinking Water Act* (RSMo 160.077).

#### **DRINKING WATER SAMPLING**

RSMo 160.077 sets standards for lead concentrations in school drinking water, stating that each Missouri school shall provide drinking water with a lead concentration level below five (5) parts per billion (ppb). This Act requires schools to conduct the inventory, sampling, remediation, and monitoring at all potable drinking water outlets used or potentially used for drinking, food preparation, and cooking or cleaning utensils.

In general conformance with the RSMo 160.077 requirements, and the Environmental Protection Agency's (EPA) *3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities* manual, initial water flushing and sampling activities were conducted on January 15 and 16, 2024, by Mr. Brad Lohrum, a Missouri-licensed lead risk assessor. Mr. Lohrum was assisted by Mr. Bob Haefner, a Missouri-licensed lead risk assessor, and Mr. Jon Tuetken, an



environmental scientist with UES. Copies of training certificates and lead licenses for Messrs. Lohrum and Haefner are included in Appendix A.

An inventory of potable drinking water outlets was provided to UES by CPS. UES personnel sampled the identified outlets utilizing the EPA's "first-draw" methods. The identified outlets were flushed, then allowed to sit undisturbed for a period of 8-18 hours. Following this stagnation period, the first 250 milliliters (ml) of water expelled from the outlets were collected in laboratory-provided containers. Copies of the drinking water sampling forms, which include a list of sample locations, and the times and dates of flushing and sampling activities, are included in Appendix B. Floor plans depicting approximate sample locations are included as Figures 1 and 2.

Using standard chain-of-custody procedures, the drinking water samples were submitted to Teklab, Inc. of Collinsville, Illinois, an independent, certified Missouri Department of Natural Resources (MDNR) Drinking Water and National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory, for analysis of lead content via EPA Method 200.8: *Determination of Trace Elements in Waters and Wastes by Inductively Coupled Plasma-Mass Spectrometry*.

## RESULTS

Laboratory analyses detected the presence of lead at or above 5 ppb in the following samples.

**TABLE 1**  
**DRINKING WATER OUTLETS AT OR ABOVE 5 PARTS PER BILLION**

Sample Number / Location and Fixture Type	Results
GMS-15 / Room 150 Left-hand Sink	70.8 ppb
GMS-17 / Room 150 Right-hand Sink	28.2 ppb
GMS-19 / Room 152 Sink	5.1 ppb
GMS-22 / Room 153 Red Sink	16.1 ppb
GMS-23 / Room 153 Blue Sink	14.2 ppb
GMS-24 / Room 153 Green Sink	13 ppb
GMS-25 / Room 153 Yellow Sink	20.7 ppb
GMS-26 / Room 153 Orange Sink	7.5 ppb
GMS-27 / Room 155 Sink	12.7 ppb
GMS-28 / Room 160 Sink	47.2 ppb
GMS-29 / Room 160 Bubbler	5.3 ppb
GMS-39 / Room 167 Left Center Sink	10 ppb
GMS-46 / Room 101 Sink	19.3 ppb
GMS-50 / Room 150 Sink	8.1 ppb
GMS-52 / Room 107 Sink	37.1 ppb
GMS-55 / Room 106 Sink	26.5 ppb
GMS-56 / Room 108 Left-hand Sink	17.6 ppb



Sample Number / Location and Fixture Type	Results
GMS-57 / Room 108 Right-hand Sink	20.2 ppb
GMS-58 / Room 108 Eye Wash Sink	8.2 ppb
GMS-62 / Room 111 Sink	33.3 ppb
GMS-64 / Room 113 Sink	17.1 ppb
GMS-66 / Room 115 Sink	12 ppb
GMS-68 / Room 116 Left-hand Sink	18 ppb
GMS-69 / Room 116 Right-hand Bubbler	30.2 ppb
GMS-70 / Room 117 Sink	16.3 ppb
GMS-72 / Room 118 Right-hand Sink	32.1 ppb
GMS-73 / Room 118 Eye Wash Sink	14.2 ppb
GMS-74 / Room 218 Right-hand Sink	42.4 ppb
GMS-75 / Room 218 Eye Wash Sink	33.1 ppb
GMS-76 / Room 217 Sink	23.7 ppb
GMS-78 / Room 216 Left-hand Sink	18.7 ppb
GMS-79 / Room 216 Right-hand Sink	22.5 ppb
GMS-80 / Room 215 Sink	10.3 ppb
GMS-84 / Room 211 Sink	23.8 ppb
GMS-92 / Room 201 Sink	19.6 ppb
GMS-94 / Room 203 Sink	34.9 ppb
GMS-96 / Room 205 Sink	12.3 ppb
GMS-98 / Room 206 Left-hand Sink	56.9 ppb
GMS-99 / Room 206 Right-hand Sink	38.4 ppb
GMS-100 / Room 207 Sink	17.8 ppb
GMS-102 / Room 208 Left-hand Sink	57.8 ppb
GMS-103 / Room 208 Right-hand Sink	84.7 ppb
GMS-104 / Room 208 Eye Wash Sink	17.6 ppb
GMS-109 / Room 99 Right-hand Sink	19.7 ppb
GMS-112 / Office I Sink	149 ppb

UES will not be able to represent that the site contains no lead-bearing water outlets beyond those detected or observed by UES during flushing and sampling activities. Copies of the drinking water analytical results are included in Appendix C.

## RECOMMENDATIONS

Our recommendations are summarized below:

- It is our understanding that the outlets identified in Table 1 have either been removed, marked as non-potable, or have otherwise been taken out of service. Should these fixtures be put back into service following remediation activities, or if replacement fixtures are to be put into service, further sampling and testing should be conducted.



\* \* \* \* \*

The following attachments are included in and complete this report:

- |            |  |
|------------|--|
| Figure 1   | - Drinking Water Sample Locations – First Floor            |
| Figure 2   | - Drinking Water Sample Locations – Second Floor           |
| Appendix A | - Certificates and Licenses of Environmental Professionals |
| Appendix B | - Drinking Water Sampling Forms                            |
| Appendix C | - Drinking Water Laboratory Data Sheets                    |
| Appendix D | - Limitations of Report                                    |

\* \* \* \* \*

We appreciate the opportunity to provide our professional environmental consulting services to Columbia Public Schools on this project. If you have any questions or comments, please contact me at (314) 997-7440.

Very truly yours,

**UES**

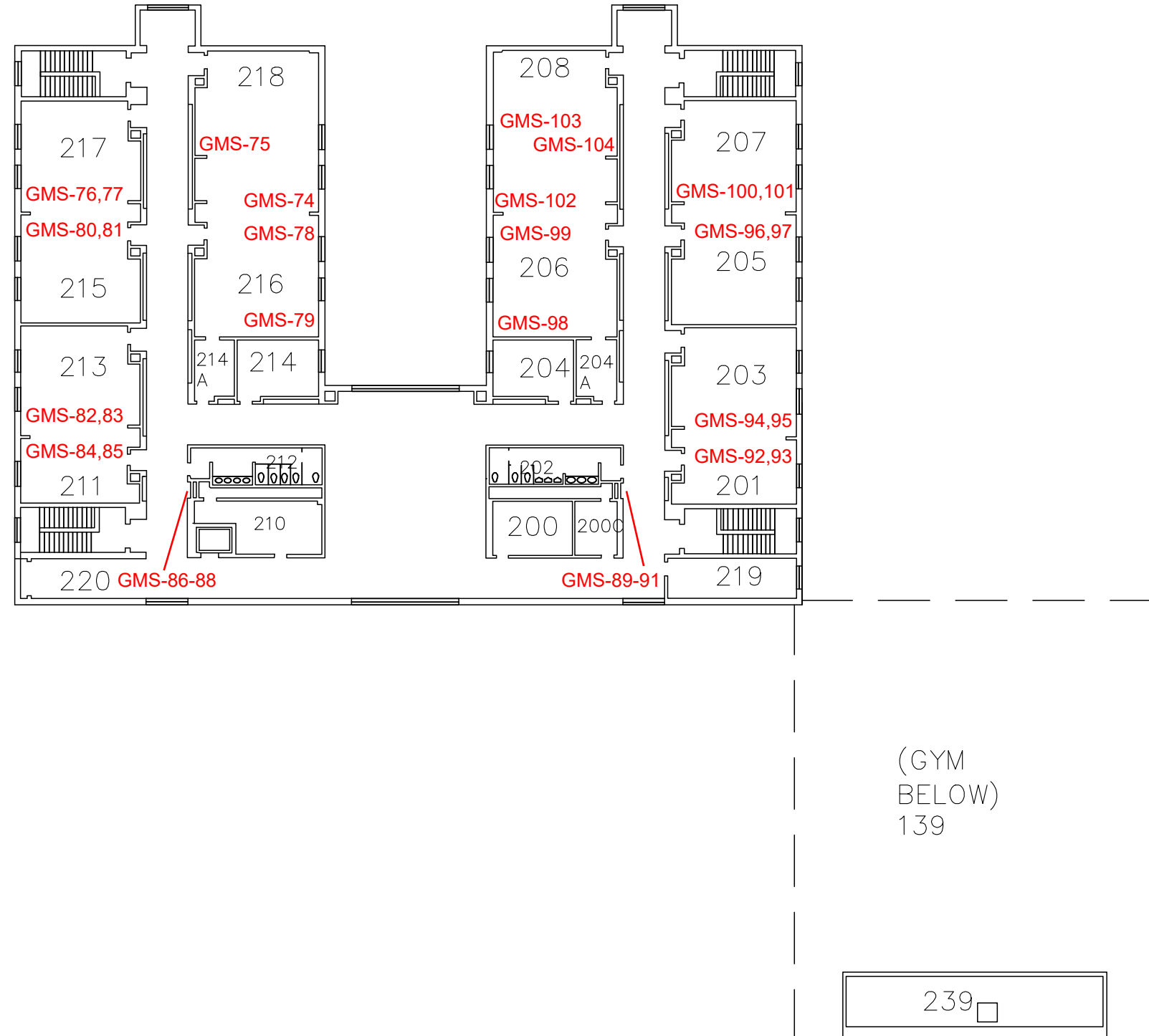
Bradley J. Lohrum  
Project Manager

BJL/MSR:bjl/jsj




- NOTES**
1. Drawing not to scale.
  2. Drawing adapted from "Gentry Middle School Floor Plan", provided by the client, dated 06/03/2022.
  3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJL	Ck'd By: BJL	App'vd By: MSR
Date: 12-21-24	Date: 12-21-24	Date: 12-21-24
		
4200 Bethel Street Columbia, Missouri		
<b>DRINKING WATER SAMPLE LOCATIONS - FIRST FLOOR</b>		
Project Number J044517.01	<b>FIGURE 1</b>	



#### NOTES

1. Drawing not to scale.
2. Drawing adapted from "Gentry Middle School Floor Plan", provided by the client, dated 06/03/2022.
3. Sample locations were identified in the field relative to building features and are approximate only.

Drawn By: BJL	Ck'd By: BJL	App'vd By: MSR
Date: 12-21-24	Date: 12-21-24	Date: 12-21-24
		
4200 Bethel Street Columbia, Missouri		
<b>DRINKING WATER SAMPLE LOCATIONS - SECOND FLOOR</b>		
Project Number J044517.01	<b>FIGURE 2</b>	



## **APPENDIX A**

### **CERTIFICATES AND LICENSES OF ENVIRONMENTAL PROFESSIONALS**



COLLEGE FOR  
PUBLIC HEALTH & SOCIAL JUSTICE

SAINT LOUIS UNIVERSITY

CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

**Bradley Lohrum**

817 S Sappington Road, Crestwood, MO 63126

has attended 8 contact hours of training and successfully passed an examination


**Lead Risk Assessor Refresher**

St. Louis, MO

Certificate # CEET 325 - 12/12/2022 - 189152

Examination Date: 12/12/2022

CEUs: 0.8

  
Christopher C. King PhD

Director, Center for Environmental  
Education and Training

Certificate expiration is 3 years from examination date for Illinois Dept. of Public Health

Center for Environmental Education and Training, 3545 Lafayette, St. Louis, MO 63104

(314) 977-8256 [shu.edu/x39753.xml](http://shu.edu/x39753.xml)

This training course has been accredited by the Illinois Department of Public Health, and by the Missouri Department of Health & Senior Services.

***STATE OF MISSOURI***  
***DEPARTMENT OF HEALTH AND SENIOR SERVICES***

**LEAD OCCUPATION LICENSE REGISTRATION**

Issued to:

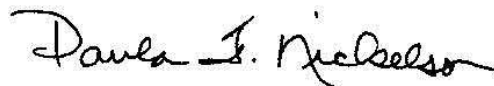
**Bradley J. Lohrum**

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

**Lead Risk Assessor**

Category of License

Issuance Date: **1/20/2023**  
Expiration Date: **1/20/2025**  
License Number: **230120-300006460**



Paula F. Nickelson  
Acting Director  
Department of Health and Senior Services



# SAINT LOUIS UNIVERSITY

## CENTER FOR ENVIRONMENTAL EDUCATION AND TRAINING

verifies that

**Robert Haefner**

3951 Dover Pl, St. Louis, MO 63116

has attended 8 contact hours of training and successfully passed examination for

### Lead Risk Assessor Refresher

St. Louis, MO

Certificate # CEET 325 3/6/2023 118035  
Examination Date: 3/6/2023  
CEUs: 0.8

Rene Dulle, MBA, Director  
Center for Environmental Education & Training

Center for Environmental Education and Training | 3545 Lafayette Ave., St. Louis, MO 63104  
(314) 977-8256 | [slu.edu/public-health-social-justice/centers-institutes/ceet.php](http://slu.edu/public-health-social-justice/centers-institutes/ceet.php)

The training course has been accredited by the Missouri Dept. of Health and Senior Services, and by the Illinois Dept. of Public Health. Certificate expiration is 3 years from examination date for Illinois Dept. of Public Health.

**STATE OF MISSOURI**  
**DEPARTMENT OF HEALTH AND SENIOR SERVICES**

**LEAD OCCUPATION LICENSE REGISTRATION**

Issued to:

**Robert J. Haefner**

The person, firm or corporation whose name appears on this certificate has fulfilled the requirements for licensure as set forth in the Missouri Revised Statutes 701.300-701.338, as long as not suspended or revoked, and is hereby authorized to engage in the activity listed below.

**Lead Risk Assessor**  
**Category of License**

Issuance Date:	<b>3/28/2023</b>
Expiration Date:	<b>3/30/2025</b>
License Number:	<b>150330-300004672</b>

*Paula F. Nickelson*

Paula F. Nickelson  
Acting Director  
Department of Health and Senior Services

Lead Licensing Program, PO Box 570, Jefferson City, MO 65102



**STATE OF MISSOURI**  
**DEPARTMENT OF HEALTH AND SENIOR SERVICES**

**Lead Abatement Contractor License**

The person, firm or corporation whose name appears on this certificate is licensed as a Lead Abatement Contractor as set forth in the Missouri Revised Statutes 701.300-701.338 and 19 CSR 30-70.180, as long as not suspended or revoked, and is hereby authorized to engage in lead-bearing substance activities.

Issued to:

**Geotechnology, LLC**

**11816 Lackland Road, Suite 150**  
**St. Louis, MO 63146**

Issuance Date: 2/8/2022  
Expiration Date: 2/8/2024  
License Number: 060208-0095



A handwritten signature in black ink, reading 'Donald G. Kauerauf', is positioned above the printed name.

Donald G. Kauerauf  
Director

Department of Health and Senior Services





## **APPENDIX B**

### **DRINKING WATER SAMPLING FORMS**

**DRINKING WATER SAMPLING FORM**

Page 1 of 5

Project Name: Columbia Public Schools Water Project Number: J044517.01  
Sampling and Reporting Services Address: 4200 Bethel Street  
Building Name: Gentry Middle School Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
GMS-01	S	Kitchen Dishwash - Left	RJH - 1/15/24 - 13:51	RJH - 1/16/24 - 24:26
GMS-02	S	Kitchen Dishwash - Right	RJH - 1/15/24 - 13:51	RJH - 1/16/24 - 24:26
GMS-03	ICE	Kitchen	JFT - 1/15/24 - 13:51	JFT - 1/16/24 - 24:26
GMS-04	S	Room 170	RJH - 1/15/24 - 13:54	RJH - 1/16/24 - 24:28
GMS-05	WF	Room 170	JFT - 1/15/24 - 13:54	JFT - 1/16/24 - 24:28
GMS-06	S	Room 171	JFT - 1/15/24 - 13:55	RJH - 1/16/24 - 24:29
GMS-07	WF	Room 171	RJH - 1/15/24 - 13:55	JFT - 1/16/24 - 24:29
GMS-08	S	Room 172	JFT - 1/15/24 - 14:00	RJH - 1/16/24 - 24:29
GMS-09	WF	Room 172	RJH - 1/15/24 - 14:00	JFT - 1/16/24 - 24:29
GMS-10	WF	Room 148	RJH - 1/15/24 - 14:04	RJH - 1/16/24 - 24:31
GMS-11	WF	Room 149	JFT - 1/15/24 - 14:05	JFT - 1/16/24 - 24:31
GMS-12	WF	Hallway at Room 150 - Left	JFT - 1/15/24 - 14:07	RJH - 1/16/24 - 24:32
GMS-13	BF	Hallway at Room 150 - Right	RJH - 1/15/24 - 14:07	JFT - 1/16/24 - 24:32
GMS-14	WF	Hallway at Room 150 - Right	RJH - 1/15/24 - 14:07	JFT - 1/16/24 - 24:32
GMS-15	S	Room 150 - Left	RJH - 1/15/24 - 14:08	JFT - 1/16/24 - 24:34
GMS-16	B	Room 150 - Left	RJH - 1/15/24 - 14:08	JFT - 1/16/24 - 24:34
GMS-17	S	Room 150 - Right	JFT - 1/15/24 - 14:08	RJH - 1/16/24 - 24:34
GMS-18	B	Room 150 - Right	JFT - 1/15/24 - 14:08	RJH - 1/16/24 - 24:34
GMS-19	S	Room 152	RJH - 1/15/24 - 14:11	RJH - 1/16/24 - 24:35
GMS-20	S	Room 154	JFT - 1/15/24 - 14:11	JFT - 1/16/24 - 24:35
GMS-21	S	Room 153 - Purple	RJH - 1/15/24 - 14:16	RJH - 1/16/24 - 24:37
GMS-22	S	Room 153 - Red	RJH - 1/15/24 - 14:16	RJH - 1/16/24 - 24:37
GMS-23	S	Room 153 - Blue	RJH - 1/15/24 - 14:16	RJH - 1/16/24 - 24:37
GMS-24	S	Room 153 - Green	JFT - 1/15/24 - 14:16	JFT - 1/16/24 - 24:37
GMS-25	S	Room 153 - Yellow	JFT - 1/15/24 - 14:16	JFT - 1/16/24 - 24:37

BF=Bottle Filling

B=Bubbler

FW=Filtered Water

ICE=Ice Machine

S=Classroom/Other Sink

WF=Water Fountain



## DRINKING WATER SAMPLING FORM

Page 2 of 5

Project Name: Columbia Public Schools Water  
Sampling and Reporting Services  
Building Name: Gentry Middle School

Project Number: J044517.01  
Address: 4200 Bethel Street  
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
GMS-26	S	Room 153 - Orange	JFT - 1/15/24 - 14:16	JFT - 1/16/24 - 24:37
GMS-27	S	Room 155	RJH - 1/15/24 - 14:18	JFT - 1/16/24 - 24:38
GMS-28	S	Room 160	RJH - 1/15/24 - 14:22	RJH - 1/16/24 - 24:40
GMS-29	B	Room 160	RJH - 1/15/24 - 14:22	RJH - 1/16/24 - 24:40
GMS-30	S	Room 162	JFT - 1/15/24 - 14:24	JFT - 1/16/24 - 24:41
GMS-31	S	Room 163	RJH - 1/15/24 - 14:27	RJH - 1/16/24 - 24:42
GMS-32	S	Room 164	JFT - 1/15/24 - 14:29	JFT - 1/16/24 - 24:42
GMS-33	S	Room 165 - Left	JFT - 1/15/24 - 14:31	RJH - 1/16/24 - 24:43
GMS-34	S	Room 165 - Left Center	JFT - 1/15/24 - 14:31	RJH - 1/16/24 - 24:43
GMS-35	S	Room 165 - Right Center	RJH - 1/15/24 - 14:31	RJH - 1/16/24 - 24:43
GMS-36	S	Room 165 - Right	RJH - 1/15/24 - 14:31	RJH - 1/16/24 - 24:43
GMS-37	S	Room 166	JFT - 1/15/24 - 14:34	JFT - 1/16/24 - 24:44
GMS-38	S	Room 167 - Left	JFT - 1/15/24 - 14:36	JFT - 1/16/24 - 24:46
GMS-39	S	Room 167 - Left Center	JFT - 1/15/24 - 14:36	JFT - 1/16/24 - 24:46
GMS-40	S	Room 167 - Right Center	JFT - 1/15/24 - 14:36	JFT - 1/16/24 - 24:46
GMS-41	S	Room 167 - Right	JFT - 1/15/24 - 14:36	JFT - 1/16/24 - 24:46
GMS-42	S	Room 168	RJH - 1/15/24 - 14:37	RJH - 1/16/24 - 24:46
GMS-43	BF	Hallway at Room 101 - Left	RJH - 1/15/24 - 14:47	RJH - 1/16/24 - 24:49
GMS-44	WF	Hallway at Room 101 - Left	RJH - 1/15/24 - 14:47	RJH - 1/16/24 - 24:49
GMS-45	WF	Hallway at Room 101 - Right	RJH - 1/15/24 - 14:47	JFT - 1/16/24 - 24:49
GMS-46	S	Room 101	RJH - 1/15/24 - 14:48	RJH - 1/16/24 - 24:51
GMS-47	B	Room 101	RJH - 1/15/24 - 14:48	RJH - 1/16/24 - 24:51
GMS-48	S	Room 103	RJH - 1/15/24 - 14:49	JFT - 1/16/24 - 24:51
GMS-49	B	Room 103	RJH - 1/15/24 - 14:49	JFT - 1/16/24 - 24:51
GMS-50	S	Room 105	RJH - 1/15/24 - 14:51	RJH - 1/16/24 - 24:52

BF=Bottle Filling  
B=Bubbler

FW=Filtered Water  
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WF=Water Fountain



**DRINKING WATER SAMPLING FORM**

Page 3 of 5

Project Name: Columbia Public Schools Water  
Sampling and Reporting Services  
Building Name: Gentry Middle School

Project Number: J044517.01  
Address: 4200 Bethel Street  
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
GMS-51	B	Room 105	RJH - 1/15/24 - 14:51	RJH - 1/16/24 - 24:52
GMS-52	S	Room 107	JFT - 1/15/24 - 14:51	JFT - 1/16/24 - 24:52
GMS-53	B	Room 107	JFT - 1/15/24 - 14:51	JFT - 1/16/24 - 24:52
GMS-54	S	Room 106	JFT - 1/15/24 - 14:53	RJH - 1/16/24 - 24:54
GMS-55	S	Room 106	RJH - 1/15/24 - 14:53	RJH - 1/16/24 - 24:54
GMS-56	S	Room 108 - Left	JFT - 1/15/24 - 14:55	JFT - 1/16/24 - 24:55
GMS-57	S	Room 108 - Right	RJH - 1/15/24 - 14:55	JFT - 1/16/24 - 24:55
GMS-58	S	Room 108 - Eyewash	BJL - 1/15/24 - 14:55	BJL - 1/16/24 - 24:55
GMS-59	BF	Hallway at Room 111 - Left	JFT - 1/15/24 - 14:57	RJH - 1/16/24 - 24:58
GMS-60	WF	Hallway at Room 111 - Left	JFT - 1/15/24 - 14:57	RJH - 1/16/24 - 24:58
GMS-61	WF	Hallway at Room 111 - Right	RJH - 1/15/24 - 14:57	JFT - 1/16/24 - 24:58
GMS-62	S	Room 111	RJH - 1/15/24 - 14:58	RJH - 1/16/24 - 24:58
GMS-63	B	Room 111	RJH - 1/15/24 - 14:58	RJH - 1/16/24 - 24:58
GMS-64	S	Room 113	JFT - 1/15/24 - 14:59	JFT - 1/16/24 - 24:59
GMS-65	B	Room 113	JFT - 1/15/24 - 14:59	JFT - 1/16/24 - 24:59
GMS-66	S	Room 115	RJH - 1/15/24 - 15:00	RJH - 1/16/24 - 1:00
GMS-67	B	Room 115	RJH - 1/15/24 - 15:00	RJH - 1/16/24 - 1:00
GMS-68	S	Room 116 - Left	JFT - 1/15/24 - 15:02	JFT - 1/16/24 - 1:01
GMS-69	B	Room 116 - Right	RJH - 1/15/24 - 15:02	JFT - 1/16/24 - 1:01
GMS-70	S	Room 117	RJH - 1/15/24 - 15:04	RJH - 1/16/24 - 1:02
GMS-71	B	Room 117	RJH - 1/15/24 - 15:04	RJH - 1/16/24 - 1:02
GMS-72	S	Room 118 - Right	JFT - 1/15/24 - 15:05	JFT - 1/16/24 - 1:03
GMS-73	S	Room 118 - Eyewash	BJL - 1/15/24 - 15:05	JFT - 1/16/24 - 1:03
GMS-74	S	Room 218 - Right	RJH - 1/15/24 - 15:08	RJH - 1/16/24 - 1:07
GMS-75	S	Room 218 - Eyewash	JFT - 1/15/24 - 15:08	JFT - 1/16/24 - 1:07

BF=Bottle Filling  
B=Bubbler

FW=Filtered Water  
ICE=Ice Machine

S=Classroom/Other Sink  
WF=Water Fountain

**DRINKING WATER SAMPLING FORM**

Page 4 of 5

Project Name: Columbia Public Schools Water  
Sampling and Reporting Services  
Building Name: Gentry Middle School

Project Number: J044517.01  
Address: 4200 Bethel Street  
Columbia, Missouri

Sample ID	Fixture Type	Location	Flushed By - Date - Time	Sampled By - Date - Time
GMS-76	S	Room 217	RJH - 1/15/24 - 15:10	RJH - 1/16/24 - 1:08
GMS-77	B	Room 217	RJH - 1/15/24 - 15:10	RJH - 1/16/24 - 1:08
GMS-78	S	Room 216 - Left	JFT - 1/15/24 - 15:11	JFT - 1/16/24 - 1:09
GMS-79	S	Room 216 - Right	RJH - 1/15/24 - 15:11	JFT - 1/16/24 - 1:09
GMS-80	S	Room 215	JFT - 1/15/24 - 15:12	RJH - 1/16/24 - 1:10
GMS-81	B	Room 215	JFT - 1/15/24 - 15:12	RJH - 1/16/24 - 1:10
GMS-82	S	Room 213	RJH - 1/15/24 - 15:13	JFT - 1/16/24 - 1:11
GMS-83	B	Room 213	RJH - 1/15/24 - 15:23	JFT - 1/16/24 - 1:11
GMS-84	S	Room 211	JFT - 1/15/24 - 15:14	RJH - 1/16/24 - 1:12
GMS-85	B	Room 211	JFT - 1/15/24 - 15:14	RJH - 1/16/24 - 1:12
GMS-86	BF	Hallway at Room 211 - Left	RJH - 1/15/24 - 15:14	JFT - 1/16/24 - 1:13
GMS-87	WF	Hallway at Room 211 - Left	RJH - 1/15/24 - 15:14	JFT - 1/16/24 - 1:13
GMS-88	WF	Hallway at Room 211 - Right	RJH - 1/15/24 - 15:14	RJH - 1/16/24 - 1:13
GMS-89	BF	Hallway at Room 201 - Left	JFT - 1/15/24 - 15:16	RJH - 1/16/24 - 1:15
GMS-90	WF	Hallway at Room 201 - Left	JFT - 1/15/24 - 15:16	RJH - 1/16/24 - 1:15
GMS-91	WF	Hallway at Room 201 - Right	RJH - 1/15/24 - 15:16	JFT - 1/16/24 - 1:15
GMS-92	S	Room 201	JFT - 1/15/24 - 15:17	RJH - 1/16/24 - 1:16
GMS-93	B	Room 201	JFT - 1/15/24 - 15:17	RJH - 1/16/24 - 1:16
GMS-94	S	Room 203	RJH - 1/15/24 - 15:17	JFT - 1/16/24 - 1:17
GMS-95	B	Room 203	RJH - 1/15/24 - 15:17	JFT - 1/16/24 - 1:17
GMS-96	S	Room 205	RJH - 1/15/24 - 15:18	RJH - 1/16/24 - 1:18
GMS-97	B	Room 205	RJH - 1/15/24 - 15:18	RJH - 1/16/24 - 1:18
GMS-98	S	Room 206 - Left	JFT - 1/15/24 - 15:19	JFT - 1/16/24 - 1:19
GMS-99	S	Room 206 - Right	JFT - 1/15/24 - 15:19	JFT - 1/16/24 - 1:19
GMS-100	S	Room 207	RJH - 1/15/24 - 15:20	RJH - 1/16/24 - 1:20

BF=Bottle Filling  
B=Bubbler

FW=Filtered Water  
ICE=Ice Machine

S=Classroom/Other Sink  
WF=Water Fountain





## **APPENDIX C**

### **DRINKING WATER LABORATORY DATA SHEETS**

February 09, 2024

Brad Lohrum  
Geotechnology, Inc.  
11816 Lackland Road  
St. Louis, MO 63146  
TEL: (314) 997-7440  
FAX: (314) 997-2067



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

**RE: J044517.01**

**WorkOrder: 24011322**

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 1/19/2024 10:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Patrick Riley  
Project Manager  
(618)344-1004 ex 44  
[patrickriley@teklabinc.com](mailto:patrickriley@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011322

**Client Project:** J044517.01

**Report Date:** 09-Feb-24

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

**Client:** Geotechnology, Inc.**Work Order:** 24011322**Client Project:** J044517.01**Report Date:** 09-Feb-24**Abbr Definition**

\* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count ( > 200 CFU )

**Client:** Geotechnology, Inc.

**Work Order:** 24011322

**Client Project:** J044517.01

**Report Date:** 09-Feb-24

### Qualifiers

- |   |  |
|---|--|
| # - Unknown hydrocarbon                               | B - Analyte detected in associated Method Blank              |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range                           |
| H - Holding times exceeded                            | I - Associated internal standard was outside method criteria |
| J - Analyte detected below quantitation limits        | M - Manual Integration used to determine area response       |
| ND - Not Detected at the Reporting Limit              | R - RPD outside accepted recovery limits                     |
| S - Spike Recovery outside recovery limits            | T - TIC(Tentatively identified compound)                     |
| X - Value exceeds Maximum Contaminant Level           |  |





## Case Narrative

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011322

**Client Project:** J044517.01

**Report Date:** 09-Feb-24

**Cooler Receipt Temp:** NA °C

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### Locations

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#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** jhriley@teklabinc.com

---

#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** EHurley@teklabinc.com

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#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415  
**Phone** (217) 698-1004  
**Fax** (217) 698-1005  
**Email** KKlostermann@teklabinc.com

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#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515  
**Phone** (630) 324-6855  
**Fax**  
**Email** arenner@teklabinc.com

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#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214  
**Phone** (913) 541-1998  
**Fax** (913) 541-1998  
**Email** jhriley@teklabinc.com

**Client:** Geotechnology, Inc.**Work Order:** 24011322**Client Project:** J044517.01**Report Date:** 09-Feb-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011322-001A	SBE-75	NELAP		1.0	1.7	µg/L	1	02/08/2024 4:37	01/15/2024 23:09
24011322-002A	SBE-76	NELAP		1.0	3.1	µg/L	1	02/08/2024 4:41	01/15/2024 23:11
24011322-003A	SBE-77	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 4:45	01/15/2024 23:11
24011322-004A	SBE-78	NELAP		1.0	3.3	µg/L	1	02/08/2024 4:50	01/15/2024 23:11
24011322-005A	SBE-79	NELAP		1.0	< 1.0	µg/L	1	02/08/2024 5:29	01/15/2024 23:11
24011322-006A	CACC-01	NELAP		1.0	1.3	µg/L	1	02/08/2024 4:54	01/15/2024 23:38
24011322-007A	CACC-02	NELAP		1.0	5.3	µg/L	1	02/08/2024 5:24	01/15/2024 23:38
24011322-008A	CACC-03	NELAP		1.0	3.8	µg/L	5	02/06/2024 15:38	01/15/2024 23:40
24011322-009A	CACC-04	NELAP		1.0	3.1	µg/L	5	02/06/2024 15:03	01/15/2024 23:40
24011322-010A	CACC-05	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:22	01/15/2024 23:42
24011322-011A	CACC-06	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:25	01/15/2024 23:44
24011322-012A	CACC-07	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:29	01/15/2024 23:44
24011322-013A	CACC-08	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 20:33	01/15/2024 23:44
24011322-014A	CACC-09	NELAP		1.0	1.1	µg/L	1	02/07/2024 20:36	01/15/2024 23:45
24011322-015A	CACC-10	NELAP		1.0	1.1	µg/L	1	02/07/2024 20:47	01/15/2024 23:45
24011322-016A	CACC-11	NELAP		1.0	1.1	µg/L	1	02/07/2024 21:02	01/15/2024 23:46
24011322-017A	CACC-12	NELAP		1.0	1.3	µg/L	1	02/07/2024 21:06	01/15/2024 23:46
24011322-018A	CACC-13	NELAP		1.0	1.2	µg/L	1	02/07/2024 21:09	01/15/2024 23:50
24011322-019A	CACC-14	NELAP		1.0	1.4	µg/L	5	02/06/2024 15:42	01/15/2024 23:50
24011322-020A	CACC-15	NELAP		1.0	1.6	µg/L	1	02/07/2024 21:13	01/15/2024 23:50
24011322-022A	CACC-17	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 21:17	01/15/2024 23:52
24011322-023A	CACC-18	NELAP		1.0	1.7	µg/L	5	02/06/2024 15:46	01/15/2024 23:52
24011322-024A	CACC-19	NELAP		1.0	2.6	µg/L	1	02/07/2024 21:20	01/15/2024 23:52
24011322-025A	CACC-20	NELAP		1.0	1.2	µg/L	1	02/07/2024 21:24	01/15/2024 23:52
24011322-026A	CACC-21	NELAP		1.0	1.3	µg/L	1	02/07/2024 21:35	01/15/2024 23:53
24011322-027A	CACC-22	NELAP		1.0	2.3	µg/L	1	02/07/2024 21:39	01/15/2024 23:53
24011322-028A	CACC-23	NELAP		1.0	1.5	µg/L	5	02/06/2024 15:51	01/15/2024 23:53
24011322-029A	CACC-24	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:11	01/15/2024 23:54
24011322-030A	CACC-25	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:15	01/15/2024 23:54
24011322-031A	CACC-26	NELAP		1.0	1.6	µg/L	1	02/05/2024 11:54	01/15/2024 23:59
24011322-032A	CACC-27	NELAP		1.0	1.6	µg/L	1	02/05/2024 11:57	01/15/2024 23:59
24011322-033A	CACC-28	NELAP		1.0	3.1	µg/L	1	02/05/2024 12:01	01/16/2024 0:01
24011322-034A	CACC-29	NELAP		1.0	2.9	µg/L	1	02/05/2024 12:05	01/16/2024 0:01
24011322-035A	CACC-30	NELAP		1.0	1.5	µg/L	1	02/05/2024 12:08	01/16/2024 0:02
24011322-036A	CACC-31	NELAP		1.0	3.7	µg/L	1	02/05/2024 12:19	01/16/2024 0:03
24011322-037A	CACC-32	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 12:23	01/16/2024 0:04
24011322-038A	GMS-01	NELAP		1.0	2.2	µg/L	1	02/05/2024 12:27	01/16/2024 0:26
24011322-039A	GMS-02	NELAP		1.0	1.9	µg/L	1	02/07/2024 19:12	01/16/2024 0:26
24011322-040A	GMS-03	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:27	01/16/2024 0:26
24011322-041A	GMS-04	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:30	01/16/2024 0:28
24011322-042A	GMS-05	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:34	01/16/2024 0:28
24011322-043A	GMS-06	NELAP		1.0	1.3	µg/L	1	02/07/2024 19:38	01/16/2024 0:29
24011322-044A	GMS-07	NELAP		1.0	< 1.0	µg/L	1	02/07/2024 19:41	01/16/2024 0:29
24011322-051A	GMS-24	NELAP		1.0	13.0	µg/L	1	02/07/2024 19:45	01/16/2024 0:37
24011322-052A	GMS-25	NELAP		1.0	20.7	µg/L	1	02/07/2024 19:56	01/16/2024 0:37
24011322-053A	GMS-26	NELAP		1.0	7.5	µg/L	1	02/07/2024 20:00	01/16/2024 0:37
24011322-054A	GMS-27	NELAP		1.0	12.7	µg/L	1	02/07/2024 20:14	01/16/2024 0:38
24011322-055A	GMS-28	NELAP		1.0	47.2	µg/L	5	02/08/2024 13:24	01/16/2024 0:40



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011322

Client Project: J044517.01

Report Date: 09-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011322-056A	GMS-29	NELAP		1.0	5.3	µg/L	1	02/07/2024 20:18	01/16/2024 0:40
24011322-057A	GMS-30	NELAP		1.0	1.0	µg/L	1	02/07/2024 22:30	01/16/2024 0:41
24011322-058A	GMS-31	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 1:21	01/16/2024 0:42
24011322-059A	GMS-32	NELAP		1.0	1.1	µg/L	1	02/09/2024 1:24	01/16/2024 0:42
24011322-060A	GMS-33	NELAP		1.0	< 1.0	µg/L	1	02/09/2024 1:28	01/16/2024 0:43

**Client:** Geotechnology, Inc.

**Work Order:** 24011322

**Client Project:** J044517.01

**Report Date:** 09-Feb-24

**Carrier:** Employee

**Received By:** MEK

**Completed by:**

**On:**

19-Jan-24

Mary E Kemp

**Reviewed by:**

**On:**

19-Jan-24

Ellie Hopkins

**Pages to follow:**

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C

NA

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice

☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☐

No ☒

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

*When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.*

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

**Any No responses must be detailed below or on the COC.**

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - MaryKemp - 1/19/2024 11:36:02 AM

Did not receive CACC-16 MEK 1/19/24

# CHAIN OF CUSTODY

pg. 48 of 74 Work order # 24011322

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

<b>Client:</b>	Geotechnology, LLC		
<b>Address:</b>	11816 Lackland Road		
<b>City / State / Zip</b>	St. Louis, MO 63146		
<b>Contact:</b>	Brad Lohrum	<b>Phone:</b>	(314) 997-7440
<b>E-Mail:</b>	blohrum@teamues.com	<b>Fax:</b>	

<b>Samples on:</b>	<input checked="" type="checkbox"/> ICE	<input type="checkbox"/> BLUE ICE	<input checked="" type="checkbox"/> NO ICE	NA °C	LTG#
<b>Preserved in:</b>	<input checked="" type="checkbox"/> LAB	<input type="checkbox"/> FIELD	<b>FOR LAB USE ONLY</b>		
<b>Lab Notes</b>					

Did not receive CACC-16 MEK 1/19/24

**Client Comments:**

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX										INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
J044517.01		Brad Lohrum																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Results Requested		Billing Instructions		# and Type of Containers										Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																													

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	1/18/24	R. L. Lohrum	1/18/24
L. J. Lohrum	1/19/24 10:00	Mary Lohrum	1/19/24 1000

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



# CHAIN OF CUSTODY

pg. 49 of 74 Work order # 24011322-

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

**Client:** Geotechnology, LLC  
**Address:** 11816 Lackland Road  
**City / State / Zip:** St. Louis, MO 63146  
**Contact:** Brad Lohrum **Phone:** (314) 997-7440  
**E-Mail:** blohrum@teamues.com **Fax:**

**Samples on:** ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#  
**Preserved in:** ☒ LAB ☒ FIELD **FOR LAB USE ONLY**  
**Lab Notes**

**Client Comments:**

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name										MATRIX		INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
J044517.01		Brad Lohrum										Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															</

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	1/18/24	RJ K	1/18/24
RJ K	1/19/24 10:00	Mary Kemp	1/19/24 1000

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



# CHAIN OF CUSTODY

pg. 50 of 74 Work order # 24011322

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

**Client:** Geotechnology, LLC  
**Address:** 11816 Lackland Road  
**City / State / Zip:** St. Louis, MO 63146  
**Contact:** Brad Lohrum **Phone:** (314) 997-7440  
**E-Mail:** blohrum@teamues.com **Fax:**

**Samples on:** ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#  
**Preserved in:** ☒ LAB ☒ FIELD **FOR LAB USE ONLY**  
**Lab Notes**

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

**Client Comments:**

Project Name/Number		Sample Collector's Name										MATRIX		INDICATE ANALYSIS REQUESTED																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
J044517.01		Brad Lohrum										Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					

Relinquished By	Date/Time	Received By	Date/Time
Brad Lohrum	1/18/24	Mary Kemp	1/18/24
RJ Wf	1/19/24 10:00		1/19/24 1000

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481





pg. 51 of 74 Work order # 24011322

<b>Client:</b> Geotechnology, LLC		<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE _____ °C LTG# _____	
<b>Address:</b> 11816 Lackland Road		<b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>	
<b>City / State / Zip</b> St. Louis, MO 63146		<b>Lab Notes</b>	
<b>Contact:</b> Brad Lohrum	<b>Phone:</b> (314) 997-7440	<b>Client Comments:</b>	
<b>E-Mail:</b> blohrum@teamues.com	<b>Fax:</b> _____		
Are these samples known to be involved in litigation? If yes, a surcharge will apply <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Are these samples known to be hazardous? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>Project Name/Number</b> J044517.01		<b>Sample Collector's Name</b> Brad Lohrum	
<b>Results Requested</b> <input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)		<b>Billing Instructions</b>	
		<b># and Type of Containers</b>	
		UNPRES	OTHER
<b>Lab Use Only</b>	<b>Sample Identification</b>	<b>Date/Time Sampled</b>	
2401323	CACC-26	1/15/24 23:59	1
-031	CACC-27	+ +	1
032	28	1/16/24 24:01	1
033	29	+ +	1
034	30	24:02	1
035	31	24:03	1
036	32	24:04	1
037	GMS-01	24:26	1
038	02		1
039	03		1
040			
<b>Relinquished By</b>		<b>Date/Time</b>	
Brad Lohrum		1/16/24	
R. J. K.		1/17/24 10:00	
<b>Received By</b>		<b>Date/Time</b>	
R. J. K.		1/18/24	
Manny Kemp		1/19/24 1000	

BottleOrder: 80481





pg. 53 of 74 Work order # 24011322

<b>Client:</b> <u>Geotechnology, LLC</u> <b>Address:</b> <u>11816 Lackland Road</u> <b>City / State / Zip</b> <u>St. Louis, MO 63146</u> <b>Contact:</b> <u>Brad Lohrum</u> <b>Phone:</b> <u>(314) 997-7440</u> <b>E-Mail:</b> <u>blohrum@teamues.com</u> <b>Fax:</b> _____	<b>Samples on:</b> <input type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE    _____ °C    LTG# _____ <b>Preserved in:</b> <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b> <b>Lab Notes</b>  <b>Client Comments:</b>
---	---

[illegible]

February 13, 2024

Brad Lohrum  
Geotechnology, Inc.  
11816 Lackland Road  
St. Louis, MO 63146  
TEL: (314) 997-7440  
FAX: (314) 997-2067



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

**RE: J044517.01**

**WorkOrder: 24011360**

Dear Brad Lohrum:

TEKLAB, INC received 16 samples on 1/19/2024 1:00:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Patrick Riley  
Project Manager  
(618)344-1004 ex 44  
[patrickriley@teklabinc.com](mailto:patrickriley@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011360

**Client Project:** J044517.01

**Report Date:** 13-Feb-24

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	8
Chain of Custody	Appended

**Client:** Geotechnology, Inc.

**Work Order:** 24011360

**Client Project:** J044517.01

**Report Date:** 13-Feb-24

### Abbr Definition

\* Analytes on report marked with an asterisk are not NELAP accredited

**CCV** Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

**CRQL** A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

**DF** Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

**DNI** Did not ignite

**DUP** Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

**ICV** Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

**IDPH** IL Dept. of Public Health

**LCS** Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

**LCSD** Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

**MBLK** Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

**MDL** "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

**MS** Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

**MSD** Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

**MW** Molecular weight

**NC** Data is not acceptable for compliance purposes

**ND** Not Detected at the Reporting Limit

**NELAP** NELAP Accredited

**PQL** Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

**RL** The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

**RPD** Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

**SPK** The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

**Surr** Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

**TIC** Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

**TNTC** Too numerous to count ( > 200 CFU )

**Client:** Geotechnology, Inc.

**Work Order:** 24011360

**Client Project:** J044517.01

**Report Date:** 13-Feb-24

### Qualifiers

- |   |  |
|---|--|
| # - Unknown hydrocarbon                               | B - Analyte detected in associated Method Blank              |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range                           |
| H - Holding times exceeded                            | I - Associated internal standard was outside method criteria |
| J - Analyte detected below quantitation limits        | M - Manual Integration used to determine area response       |
| ND - Not Detected at the Reporting Limit              | R - RPD outside accepted recovery limits                     |
| S - Spike Recovery outside recovery limits            | T - TIC(Tentatively identified compound)                     |
| X - Value exceeds Maximum Contaminant Level           |  |



## Case Narrative

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011360

**Client Project:** J044517.01

**Report Date:** 13-Feb-24

**Cooler Receipt Temp:** N/A °C

### Locations

#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** jhriley@teklabinc.com

#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** EHurley@teklabinc.com

#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415  
**Phone** (217) 698-1004  
**Fax** (217) 698-1005  
**Email** KKlostermann@teklabinc.com

#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515  
**Phone** (630) 324-6855  
**Fax**  
**Email** arenner@teklabinc.com

#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214  
**Phone** (913) 541-1998  
**Fax** (913) 541-1998  
**Email** jhriley@teklabinc.com



**Client:** Geotechnology, Inc.**Work Order:** 24011360**Client Project:** J044517.01**Report Date:** 13-Feb-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011360

Client Project: J044517.01

Report Date: 13-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011360-001A	GMS-08	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:19	01/16/2024 0:29
24011360-002A	GMS-09	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:22	01/16/2024 0:29
24011360-003A	GMS-10	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:26	01/16/2024 0:31
24011360-004A	GMS-11	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:30	01/16/2024 0:31
24011360-005A	GMS-12	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:33	01/16/2024 0:32
24011360-006A	GMS-13	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:55	01/16/2024 0:32
24011360-007A	GMS-14	NELAP		1.0	< 1.0	µg/L	1	02/05/2024 15:59	01/16/2024 0:32
24011360-008A	GMS-15	NELAP		1.0	70.8	µg/L	5	02/13/2024 10:21	01/16/2024 0:34
24011360-009A	GMS-16	NELAP		1.0	4.9	µg/L	5	02/13/2024 10:51	01/16/2024 0:34
24011360-010A	GMS-17	NELAP		1.0	28.2	µg/L	5	02/13/2024 10:26	01/16/2024 0:34
24011360-011A	GMS-18	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 10:30	01/16/2024 0:34
24011360-012A	GMS-19	NELAP		1.0	5.1	µg/L	1	02/05/2024 16:03	01/16/2024 0:35
24011360-013A	GMS-20	NELAP		1.0	4.7	µg/L	1	02/05/2024 16:06	01/16/2024 0:35
24011360-014A	GMS-21	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 10:34	01/16/2024 0:37
24011360-015A	GMS-22	NELAP		1.0	16.1	µg/L	5	02/13/2024 10:38	01/16/2024 0:37
24011360-016A	GMS-23	NELAP		1.0	14.2	µg/L	5	02/13/2024 10:43	01/16/2024 0:37

Client: Geotechnology, Inc.

Work Order: 24011360

Client Project: J044517.01

Report Date: 13-Feb-24

Carrier: Employee

Received By: LM

Completed by:

On:

19-Jan-24

*Amber Dilallo*

Amber Dilallo

Reviewed by:

On:

19-Jan-24

*Ellie Hopkins*

Ellie Hopkins

Pages to follow:

Chain of custody

2

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C

N/A

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice

☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

*When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.*

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - amberdilallo - 1/19/2024 2:04:09 PM

# CHAIN OF CUSTODY

pg. 1 of 2 Work order # 24011360

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Geotechnology, LLC  
 Address: 11816 Lackland Road  
 City / State / Zip: St. Louis, MO 63146  
 Contact: Brad Lohrum Phone: (314) 997-7440  
 E-Mail: blohrum@teamues.com Fax: \_\_\_\_\_

Samples on: ☒ ICE ☒ BLUE ICE ☒ NO ICE N/A °C LTG# \_\_\_\_\_  
 Preserved in: ☒ LAB ☒ FIELD **FOR LAB USE ONLY**  
 Lab Notes: COC received via client email 1/19

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																		
J044517.01		Brad Lohrum																						
Results Requested		Billing Instructions		# and Type of Containers		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8												
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)																								
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
24011360	GMS-08	1/16/24 24:29	1									X												
002	GMS-09	+	1									X												
003	10	24:31	1									X												
004	11	+	1									X												
005	12	24:32	1									X												
006	13	+	1									X												
007	14	+	1									X												
008	15	24:34	1									X												
009	16	+	1									X												
010	17	+	1									X												

Relinquished By		Date/Time		Received By		Date/Time	
<u>Brad Lohrum</u>		1/19/24 13:00		<u>Lohrum</u>		1/19/24 1300	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



pg. 2 of 2 Work order # 24011360

**TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005**

[illegible]

Bottle Order: 80481



February 14, 2024

Brad Lohrum  
Geotechnology, Inc.  
11816 Lackland Road  
St. Louis, MO 63146  
TEL: (314) 997-7440  
FAX: (314) 997-2067



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

**RE: J044517.01**

**WorkOrder: 24011316**

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 1/19/2024 10:12:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Shelly A. Hennessy  
Project Manager  
(618)344-1004 ex 36  
[SHennessy@teklabinc.com](mailto:SHennessy@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011316

**Client Project:** J044517.01

**Report Date:** 14-Feb-24

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

**Client:** Geotechnology, Inc.**Work Order:** 24011316**Client Project:** J044517.01**Report Date:** 14-Feb-24**Abbr Definition**

\* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count ( > 200 CFU )



**Client:** Geotechnology, Inc.

**Work Order:** 24011316

**Client Project:** J044517.01

**Report Date:** 14-Feb-24

### Qualifiers

- |   |  |
|---|--|
| # - Unknown hydrocarbon                               | B - Analyte detected in associated Method Blank              |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range                           |
| H - Holding times exceeded                            | I - Associated internal standard was outside method criteria |
| J - Analyte detected below quantitation limits        | M - Manual Integration used to determine area response       |
| ND - Not Detected at the Reporting Limit              | R - RPD outside accepted recovery limits                     |
| S - Spike Recovery outside recovery limits            | T - TIC(Tentatively identified compound)                     |
| X - Value exceeds Maximum Contaminant Level           |  |



## Case Narrative

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011316

**Client Project:** J044517.01

**Report Date:** 14-Feb-24

**Cooler Receipt Temp:** N/A °C

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### Locations

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#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** jhriley@teklabinc.com

---

#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425  
**Phone** (618) 344-1004  
**Fax** (618) 344-1005  
**Email** EHurley@teklabinc.com

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#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415  
**Phone** (217) 698-1004  
**Fax** (217) 698-1005  
**Email** KKlostermann@teklabinc.com

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#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515  
**Phone** (630) 324-6855  
**Fax**  
**Email** arenner@teklabinc.com

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#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214  
**Phone** (913) 541-1998  
**Fax** (913) 541-1998  
**Email** jhriley@teklabinc.com

**Client:** Geotechnology, Inc.**Work Order:** 24011316**Client Project:** J044517.01**Report Date:** 14-Feb-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011316

Client Project: J044517.01

Report Date: 14-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011316-001A	GMS-34	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 19:09	01/16/2024 0:43
24011316-002A	GMS-35	NELAP		1.0	1.1	µg/L	1	02/13/2024 19:13	01/16/2024 0:43
24011316-003A	GMS-36	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 19:35	01/16/2024 0:43
24011316-004A	GMS-37	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 19:39	01/16/2024 0:44
24011316-005A	GMS-38	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 19:42	01/16/2024 0:46
24011316-006A	GMS-39	NELAP		1.0	10.0	µg/L	1	02/13/2024 19:46	01/16/2024 0:46
24011316-007A	GMS-40	NELAP		1.0	1.3	µg/L	5	02/14/2024 8:19	01/16/2024 0:46
24011316-008A	GMS-41	NELAP		1.0	2.2	µg/L	1	02/13/2024 19:50	01/16/2024 0:46
24011316-009A	GMS-42	NELAP		1.0	2.0	µg/L	1	02/13/2024 19:53	01/16/2024 0:46
24011316-010A	GMS-43	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 19:57	01/16/2024 0:49
24011316-011A	GMS-44	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 20:01	01/16/2024 0:49
24011316-012A	GMS-45	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 20:04	01/16/2024 0:49
24011316-013A	GMS-46	NELAP		1.0	19.3	µg/L	1	02/14/2024 9:19	01/16/2024 0:51
24011316-014A	GMS-47	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 10:41	01/16/2024 0:51
24011316-015A	GMS-48	NELAP		1.0	4.2	µg/L	1	02/14/2024 9:23	01/16/2024 0:51
24011316-016A	GMS-49	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 9:28	01/16/2024 0:51
24011316-017A	GMS-50	NELAP		1.0	8.1	µg/L	5	02/14/2024 8:23	01/16/2024 0:52
24011316-018A	GMS-51	NELAP		1.0	< 1.0	µg/L	5	02/14/2024 8:27	01/16/2024 0:52
24011316-019A	GMS-52	NELAP		1.0	37.1	µg/L	5	02/14/2024 8:32	01/16/2024 0:52
24011316-020A	GMS-53	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 9:32	01/16/2024 0:52
24011316-021A	GMS-54	NELAP		1.0	4.1	µg/L	1	02/14/2024 9:36	01/16/2024 0:54
24011316-022A	GMS-55	NELAP		1.0	26.5	µg/L	1	02/14/2024 9:41	01/16/2024 0:54
24011316-023A	GMS-56	NELAP		1.0	17.6	µg/L	1	02/14/2024 10:15	01/16/2024 0:55
24011316-024A	GMS-57	NELAP		1.0	20.2	µg/L	1	02/14/2024 10:20	01/16/2024 0:55
24011316-025A	GMS-58	NELAP		1.0	8.2	µg/L	1	02/14/2024 10:24	01/16/2024 0:55
24011316-026A	GMS-59	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 10:28	01/16/2024 0:58
24011316-027A	GMS-60	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 10:33	01/16/2024 0:58
24011316-028A	GMS-61	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 11:33	01/16/2024 0:58
24011316-029A	GMS-62	NELAP		1.0	33.3	µg/L	1	02/14/2024 10:37	01/16/2024 0:58
24011316-030A	GMS-63	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 11:12	01/16/2024 0:58
24011316-031A	GMS-64	NELAP		1.0	17.1	µg/L	1	02/14/2024 11:16	01/16/2024 0:59
24011316-032A	GMS-65	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 22:02	01/16/2024 0:59
24011316-033A	GMS-66	NELAP		1.0	12.0	µg/L	1	02/13/2024 22:05	01/16/2024 1:00
24011316-034A	GMS-67	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 22:09	01/16/2024 1:00
24011316-035A	GMS-68	NELAP		1.0	18.0	µg/L	1	02/13/2024 22:13	01/16/2024 1:01
24011316-036A	GMS-69	NELAP		1.0	30.2	µg/L	1	02/13/2024 22:24	01/16/2024 1:01
24011316-037A	GMS-70	NELAP		1.0	16.3	µg/L	1	02/13/2024 22:27	01/16/2024 1:02
24011316-038A	GMS-71	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 22:31	01/16/2024 1:02
24011316-039A	GMS-72	NELAP		1.0	32.1	µg/L	1	02/13/2024 22:35	01/16/2024 1:03
24011316-040A	GMS-73	NELAP		1.0	14.2	µg/L	1	02/13/2024 22:49	01/16/2024 1:03
24011316-041A	GMS-74	NELAP		1.0	42.4	µg/L	1	02/13/2024 22:53	01/16/2024 1:07
24011316-042A	GMS-75	NELAP		1.0	33.1	µg/L	1	02/13/2024 22:57	01/16/2024 1:07
24011316-043A	GMS-76	NELAP		1.0	23.7	µg/L	5	02/14/2024 8:36	01/16/2024 1:08
24011316-044A	GMS-77	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 23:00	01/16/2024 1:08
24011316-045A	GMS-78	NELAP		1.0	18.7	µg/L	1	02/13/2024 23:04	01/16/2024 1:09
24011316-046A	GMS-79	NELAP		1.0	22.5	µg/L	1	02/13/2024 23:08	01/16/2024 1:09
24011316-047A	GMS-80	NELAP		1.0	10.3	µg/L	1	02/13/2024 23:19	01/16/2024 1:10
24011316-048A	GMS-81	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 23:22	01/16/2024 1:10



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011316

Client Project: J044517.01

Report Date: 14-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011316-049A	GMS-82	NELAP		1.0	2.7	µg/L	1	02/13/2024 23:37	01/16/2024 1:11
24011316-050A	GMS-83	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 23:41	01/16/2024 1:11
24011316-051A	GMS-84	NELAP		1.0	23.8	µg/L	1	02/13/2024 23:44	01/16/2024 1:12
24011316-052A	GMS-85	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 23:48	01/16/2024 1:12
24011316-053A	GMS-86	NELAP		1.0	< 1.0	µg/L	1	02/13/2024 23:52	01/16/2024 1:13
24011316-054A	GMS-87	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 0:03	01/16/2024 1:13
24011316-055A	GMS-88	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 0:06	01/16/2024 1:13
24011316-056A	GMS-89	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 0:10	01/16/2024 1:15
24011316-057A	GMS-90	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 11:20	01/16/2024 1:15
24011316-058A	GMS-91	NELAP		1.0	< 1.0	µg/L	5	02/14/2024 8:40	01/16/2024 1:15
24011316-059A	GMS-92	NELAP		1.0	19.6	µg/L	1	02/14/2024 11:25	01/16/2024 1:16
24011316-060A	GMS-93	NELAP		1.0	< 1.0	µg/L	1	02/14/2024 11:29	01/16/2024 1:16

Client: Geotechnology, Inc.

Work Order: 24011316

Client Project: J044517.01

Report Date: 14-Feb-24

Carrier: Employee

Received By: NR

Completed by:

On:

19-Jan-24

Amber Dilallo

Reviewed by:

On:

19-Jan-24

Ellie Hopkins

Pages to follow:

Chain of custody

6

Extra pages included

0

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C N/A

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

*When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.*

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

Any No responses must be detailed below or on the COC.

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - amberdilallo - 1/19/2024 11:24:08 AM

pg. 54 of 74 Work order # 24011316

<b>Client:</b> Geotechnology, LLC	<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE <u>NA</u> °C LTG# _____
<b>Address:</b> 11816 Lackland Road	<b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>
<b>City / State / Zip</b> St. Louis, MO 63146	<b>Lab Notes</b>
<b>Contact:</b> Brad Lohrum <b>Phone:</b> (314) 997-7440	<b>Client Comments:</b>
<b>E-Mail:</b> blohrum@teamues.com <b>Fax:</b> _____	

[illegible]

pg. 55 of 74 Work order # 24011316

<b>Client:</b> <u>Geotechnology, LLC</u> <b>Address:</b> <u>11816 Lackland Road</u> <b>City / State / Zip</b> <u>St. Louis, MO 63146</u> <b>Contact:</b> <u>Brad Lohrum</u> <b>Phone:</b> <u>(314) 997-7440</u> <b>E-Mail:</b> <u>blohrum@teamues.com</u> <b>Fax:</b> _____	<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE _____ °C LTG# _____ <b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b> <b>Lab Notes</b>  <b>Client Comments:</b>
---	--

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No

Are these samples known to be hazardous? ☐ Yes ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

[illegible]

Bottle Order: 80481





pg. 56 of 74    Work order # 24011316

<b>Client:</b> <u>Geotechnology, LLC</u> <b>Address:</b> <u>11816 Lackland Road</u> <b>City / State / Zip</b> <u>St. Louis, MO 63146</u> <b>Contact:</b> <u>Brad Lohrum</u> <b>Phone:</b> <u>(314) 997-7440</u> <b>E-Mail:</b> <u>blohrum@teamues.com</u> <b>Fax:</b> _____	<b>Samples on:</b> <input type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE _____ °C LTG# _____ <b>Preserved in:</b> <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b> <b>Lab Notes</b>  <b>Client Comments:</b>
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[illegible]

# CHAIN OF CUSTODY

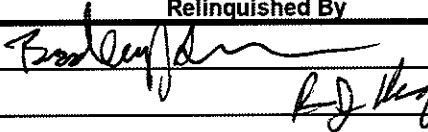
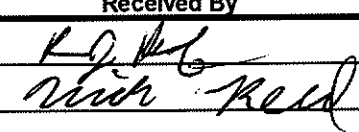
pg. 57 of 74 Work order # 24011314

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

<b>Client:</b> Geotechnology, LLC <b>Address:</b> 11816 Lackland Road <b>City / State / Zip:</b> St. Louis, MO 63146 <b>Contact:</b> Brad Lohrum <b>Phone:</b> (314) 997-7440 <b>E-Mail:</b> blohrum@teamues.com <b>Fax:</b>	<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE _____ °C <b>LTG#</b> _____ <b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b>FOR LAB USE ONLY</b> <b>Lab Notes</b>  <b>Client Comments:</b>
--	--

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																																			
J044517.01		Brad Lohrum																																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8																	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous																													
Lab Use Only	Sample Identification	Date/Time Sampled																																							
24011314-031	GMS-64	1/16/24 24:59	1										X																												
032	GMS-65	+	1										X																												
033	66	1:00	1										X																												
034	67	+	1										X																												
035	68	1:01	1										X																												
036	69	+	1										X																												
037	70	1:02	1										X																												
038	71	+	1										X																												
039	72	1:03	1										X																												
040	73	+	1										X																												

Relinquished By		Date/Time	Received By		Date/Time
 R. J. Lohrum		1/18/24	 R. J. Lohrum		1/18/24
		1/19/24 10:00			1/19/24 1012

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



# CHAIN OF CUSTODY

pg. 58 of 74 Work order # 24011316

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

<b>Client:</b> Geotechnology, LLC <b>Address:</b> 11816 Lackland Road <b>City / State / Zip:</b> St. Louis, MO 63146 <b>Contact:</b> Brad Lohrum <b>Phone:</b> (314) 997-7440 <b>E-Mail:</b> blohrum@teamues.com <b>Fax:</b>	<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE °C LTG# <b>Preserved in:</b> <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <b>FOR LAB USE ONLY</b> <b>Lab Notes</b> <b>Client Comments:</b>
--	---

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																																			
J044517.01		Brad Lohrum																																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8																	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)																																									
Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																								
24011316-041	GMS-74	1/16/24 1:07	1									X					X																								
041	GMS-75	+	1									X					X																								
043	76	1:08	1									X					X																								
044	77	+	1									X					X																								
045	78	1:09	1									X					X																								
046	79	+	1									X					X																								
047	80	1:10	1									X					X																								
048	81	+	1									X					X																								
049	82	1:11	1									X					X																								
050	83	+	1									X					X																								

Relinquished By		Date/Time		Received By		Date/Time	
Brad Lohrum		1/18/24		RJ Reed		1/18/24	
RJ Reed		1/19/24 10:00		RJ Reed		1/19/24 1012	

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



pg. 59 of 74 Work order # 24011314

<b>Client:</b>	Geotechnology, LLC	
<b>Address:</b>	11816 Lackland Road	
<b>City / State / Zip</b>	St. Louis, MO 63146	
<b>Contact:</b>	Brad Lohrum	<b>Phone:</b> (314) 997-7440
<b>E-Mail:</b>	blohrum@teamues.com	<b>Fax:</b>

<b>Samples on:</b>	<input checked="" type="checkbox"/> ICE	<input checked="" type="checkbox"/> BLUE ICE	<input checked="" type="checkbox"/> NO ICE	_____ °C	<b>LTG#</b> _____
<b>Preserved in:</b>	<input checked="" type="checkbox"/> LAB	<input checked="" type="checkbox"/> FIELD	<b><u>FOR LAB USE ONLY</u></b>		
<b>Lab Notes</b>					
<b>Client Comments:</b>					

[illegible]

February 15, 2024

Brad Lohrum  
Geotechnology, Inc.  
11816 Lackland Road  
St. Louis, MO 63146  
TEL: (314) 997-7440  
FAX: (314) 997-2067



Illinois	100226
Kansas	E-10374
Louisiana	05002
Louisiana	05003
Oklahoma	9978

**RE: J044517.01**

**WorkOrder: 24011317**

Dear Brad Lohrum:

TEKLAB, INC received 60 samples on 1/19/2024 10:00:00 AM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,



Shelly A. Hennessy  
Project Manager  
(618)344-1004 ex 36  
[SHennessy@teklabinc.com](mailto:SHennessy@teklabinc.com)



## Report Contents

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011317

**Client Project:** J044517.01

**Report Date:** 15-Feb-24

**This reporting package includes the following:**

Cover Letter	1
Report Contents	2
Definitions	3
Case Narrative	5
Accreditations	6
Laboratory Results	7
Receiving Check List	9
Chain of Custody	Appended

**Client:** Geotechnology, Inc.**Work Order:** 24011317**Client Project:** J044517.01**Report Date:** 15-Feb-24**Abbr Definition**

\* Analytes on report marked with an asterisk are not NELAP accredited

CCV Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.

CRQL A Client Requested Quantitation Limit is a reporting limit that varies according to customer request. The CRQL may not be less than the MDL.

DF Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilution factors.

DNI Did not ignite

DUP Laboratory duplicate is a replicate aliquot prepared under the same laboratory conditions and independently analyzed to obtain a measure of precision.

ICV Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.

IDPH IL Dept. of Public Health

LCS Laboratory control sample is a sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes and analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system.

LCSD Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MBLK Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.

MDL "The method detection limit is defined as the minimum measured concentration of a substance that can be reported with 99% confidence that the measured concentration is distinguishable from method blank results."

MS Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).

MSD Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).

MW Molecular weight

NC Data is not acceptable for compliance purposes

ND Not Detected at the Reporting Limit

NELAP NELAP Accredited

PQL Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions.

RL The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.

RPD Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).

SPK The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.

Surr Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.

TIC Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"

TNTC Too numerous to count ( > 200 CFU )



**Client:** Geotechnology, Inc.

**Work Order:** 24011317

**Client Project:** J044517.01

**Report Date:** 15-Feb-24

### Qualifiers

- |   |  |
|---|--|
| # - Unknown hydrocarbon                               | B - Analyte detected in associated Method Blank              |
| C - RL shown is a Client Requested Quantitation Limit | E - Value above quantitation range                           |
| H - Holding times exceeded                            | I - Associated internal standard was outside method criteria |
| J - Analyte detected below quantitation limits        | M - Manual Integration used to determine area response       |
| ND - Not Detected at the Reporting Limit              | R - RPD outside accepted recovery limits                     |
| S - Spike Recovery outside recovery limits            | T - TIC(Tentatively identified compound)                     |
| X - Value exceeds Maximum Contaminant Level           |  |



## Case Narrative

<http://www.teklabinc.com/>

**Client:** Geotechnology, Inc.

**Work Order:** 24011317

**Client Project:** J044517.01

**Report Date:** 15-Feb-24

**Cooler Receipt Temp:** N/A °C

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### Locations

---

#### Collinsville

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425

**Phone** (618) 344-1004

**Fax** (618) 344-1005

**Email** jhriley@teklabinc.com

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#### Collinsville Air

**Address** 5445 Horseshoe Lake Road  
Collinsville, IL 62234-7425

**Phone** (618) 344-1004

**Fax** (618) 344-1005

**Email** EHurley@teklabinc.com

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#### Springfield

**Address** 3920 Pintail Dr  
Springfield, IL 62711-9415

**Phone** (217) 698-1004

**Fax** (217) 698-1005

**Email** KKlostermann@teklabinc.com

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#### Chicago

**Address** 1319 Butterfield Rd.  
Downers Grove, IL 60515

**Phone** (630) 324-6855

**Fax**

**Email** arenner@teklabinc.com

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#### Kansas City

**Address** 8421 Nieman Road  
Lenexa, KS 66214

**Phone** (913) 541-1998

**Fax** (913) 541-1998

**Email** jhriley@teklabinc.com

**Client:** Geotechnology, Inc.**Work Order:** 24011317**Client Project:** J044517.01**Report Date:** 15-Feb-24

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2025	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2024	Collinsville
Louisiana	LDEQ	05002	NELAP	6/30/2024	Collinsville
Louisiana	LDEQ	05003	NELAP	6/30/2024	Collinsville
Oklahoma	ODEQ	9978	NELAP	8/31/2024	Collinsville
Arkansas	ADEQ	88-0966		3/14/2024	Collinsville
Illinois	IDPH	17584		5/31/2025	Collinsville
Iowa	IDNR	430		6/1/2024	Collinsville
Kentucky	UST	0073		1/31/2025	Collinsville
Missouri	MDNR	00930		10/31/2026	Collinsville
Missouri	MDNR	930		1/31/2025	Collinsville



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011317-001A	GMS-94	NELAP		1.0	34.9	µg/L	1	02/15/2024 9:48	01/16/2024 1:17
24011317-002A	GMS-95	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 9:53	01/16/2024 1:17
24011317-003A	GMS-96	NELAP		1.0	12.3	µg/L	5	02/14/2024 8:44	01/16/2024 1:18
24011317-004A	GMS-97	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 9:58	01/16/2024 1:18
24011317-005A	GMS-98	NELAP		1.0	56.9	µg/L	1	02/15/2024 10:45	01/16/2024 1:19
24011317-006A	GMS-99	NELAP		1.0	38.4	µg/L	1	02/15/2024 10:03	01/16/2024 1:19
24011317-007A	GMS-100	NELAP		1.0	17.8	µg/L	1	02/15/2024 10:50	01/16/2024 1:20
24011317-008A	GMS-101	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 10:55	01/16/2024 1:20
24011317-009A	GMS-102	NELAP		1.0	57.8	µg/L	5	02/13/2024 9:55	01/16/2024 1:22
24011317-010A	GMS-103	NELAP		1.0	84.7	µg/L	5	02/13/2024 9:34	01/16/2024 1:22
24011317-011A	GMS-104	NELAP		1.0	17.6	µg/L	5	02/13/2024 9:38	01/16/2024 1:22
24011317-012A	GMS-105	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:01	01/16/2024 1:26
24011317-013A	GMS-106	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:06	01/16/2024 1:26
24011317-014A	GMS-107	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:11	01/16/2024 1:26
24011317-015A	GMS-108	NELAP		1.0	< 1.0	µg/L	1	02/15/2024 11:16	01/16/2024 1:26
24011317-016A	GMS-109	NELAP		1.0	19.7	µg/L	1	02/02/2024 19:19	01/16/2024 1:26
24011317-017A	GMS-110	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:23	01/16/2024 1:28
24011317-018A	GMS-111	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:27	01/16/2024 1:28
24011317-019A	GMS-112	NELAP		5.0	149	µg/L	5	02/09/2024 5:31	01/16/2024 1:28
24011317-020A	RBE-01	NELAP		1.0	1.2	µg/L	5	02/13/2024 9:42	01/16/2024 1:52
24011317-021A	RBE-02	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 9:47	01/16/2024 1:55
24011317-022A	RBE-03	NELAP		1.0	< 1.0	µg/L	5	02/13/2024 9:51	01/16/2024 1:55
24011317-023A	RBE-04	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:48	01/16/2024 1:57
24011317-024A	RBE-05	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:35	01/16/2024 1:58
24011317-025A	RBE-06	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:39	01/16/2024 1:59
24011317-026A	RBE-07	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 19:43	01/16/2024 2:00
24011317-027A	RBE-08	NELAP		1.0	9.9	µg/L	1	02/02/2024 20:12	01/16/2024 2:02
24011317-028A	RBE-09	NELAP		1.0	2.3	µg/L	5	02/12/2024 16:05	01/16/2024 2:02
24011317-029A	RBE-10	NELAP		1.0	2.0	µg/L	5	02/12/2024 16:09	01/16/2024 2:02
24011317-030A	RBE-11	NELAP		1.0	5.0	µg/L	5	02/12/2024 16:13	01/16/2024 2:02
24011317-031A	RBE-12	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:41	01/16/2024 2:03
24011317-032A	RBE-13	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:16	01/16/2024 2:06
24011317-033A	RBE-14	NELAP		1.0	< 1.0	µg/L	5	02/12/2024 15:13	01/16/2024 2:06
24011317-034A	RBE-15	NELAP		1.0	< 1.0	µg/L	5	02/12/2024 15:17	01/16/2024 2:06
24011317-035A	RBE-16	NELAP		1.0	1.6	µg/L	1	02/02/2024 20:21	01/16/2024 2:07
24011317-036A	RBE-17	NELAP		1.0	1.1	µg/L	1	02/02/2024 20:25	01/16/2024 2:08
24011317-037A	RBE-18	NELAP		1.0	1.5	µg/L	1	02/02/2024 20:29	01/16/2024 2:08
24011317-038A	RBE-19	NELAP		1.0	1.8	µg/L	1	02/02/2024 20:33	01/16/2024 2:09
24011317-039A	RBE-20	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 20:37	01/16/2024 2:10
24011317-040A	RBE-21	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:35	01/16/2024 2:11
24011317-041A	RBE-22	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:06	01/16/2024 2:11
24011317-042A	RBE-23	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:10	01/16/2024 2:11
24011317-043A	RBE-24	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:14	01/16/2024 2:12
24011317-044A	RBE-25	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:18	01/16/2024 2:12
24011317-045A	RBE-26	NELAP		1.0	4.3	µg/L	5	02/12/2024 15:22	01/16/2024 2:13
24011317-046A	RBE-27	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:22	01/16/2024 2:14
24011317-047A	RBE-28	NELAP		1.0	1.1	µg/L	1	02/02/2024 21:27	01/16/2024 2:17
24011317-048A	RBE-29	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 21:31	01/16/2024 2:18



## Laboratory Results

<http://www.teklabinc.com/>

Client: Geotechnology, Inc.

Work Order: 24011317

Client Project: J044517.01

Report Date: 15-Feb-24

Matrix: DRINKING WATER

Sample ID	Client Sample ID	Certification	Qual	RL	Result	Units	DF	Date Analyzed	Date Collected
EPA 600 4.1.4, 200.8 R5.4, METALS BY ICPMS (TOTAL)									
Lead									
24011317-049A	RBE-30	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:00	01/16/2024 2:19
24011317-050A	RBE-31	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:04	01/16/2024 2:20
24011317-051A	RBE-32	NELAP		1.0	1.4	µg/L	1	02/02/2024 22:28	01/16/2024 2:20
24011317-052A	RBE-33	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:08	01/16/2024 2:21
24011317-053A	RBE-34	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:12	01/16/2024 2:21
24011317-054A	RBE-35	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:16	01/16/2024 2:21
24011317-055A	RBE-36	NELAP		1.0	< 1.0	µg/L	1	02/02/2024 22:20	01/16/2024 2:22
24011317-056A	RBE-37	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:08	01/16/2024 2:22
24011317-057A	RBE-38	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:12	01/16/2024 2:23
24011317-058A	RBE-39	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:41	01/16/2024 2:23
24011317-059A	RBE-40	NELAP		1.0	< 1.0	µg/L	1	02/03/2024 0:45	01/16/2024 2:24
24011317-060A	RBE-41	NELAP		1.0	1.7	µg/L	1	02/03/2024 0:49	01/16/2024 2:25

**Client:** Geotechnology, Inc.

**Work Order:** 24011317

**Client Project:** J044517.01

**Report Date:** 15-Feb-24

**Carrier:** Employee

**Received By:** LM

**Completed by:**

**On:**

19-Jan-24

Amber Dilallo

**Reviewed by:**

**On:**

19-Jan-24

Ellie Hopkins

**Pages to follow:**

Chain of custody

**6**

Extra pages included

**0**

Shipping container/cooler in good condition?

Yes ☒

No ☐

Not Present ☐

Temp °C **N/A**

Type of thermal preservation?

None ☒

Ice ☐

Blue Ice ☐

Dry Ice ☐

Chain of custody present?

Yes ☒

No ☐

Chain of custody signed when relinquished and received?

Yes ☒

No ☐

Chain of custody agrees with sample labels?

Yes ☒

No ☐

Samples in proper container/bottle?

Yes ☒

No ☐

Sample containers intact?

Yes ☒

No ☐

Sufficient sample volume for indicated test?

Yes ☒

No ☐

All samples received within holding time?

Yes ☒

No ☐

Reported field parameters measured:

Field ☐

Lab ☐

NA ☒

Container/Temp Blank temperature in compliance?

Yes ☒

No ☐

*When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.*

Water – at least one vial per sample has zero headspace?

Yes ☐

No ☐

No VOA vials ☒

Water - TOX containers have zero headspace?

Yes ☐

No ☐

No TOX containers ☒

Water - pH acceptable upon receipt?

Yes ☒

No ☐

NA ☐

NPDES/CWA TCN interferences checked/treated in the field?

Yes ☐

No ☐

NA ☒

**Any No responses must be detailed below or on the COC.**

Samples were checked for turbidity and then preserved with nitric acid upon arrival in the laboratory. - amberdilallo - 1/19/2024 11:33:21 AM

pg. 60 of 74 Work order # 24011317

<b>Client:</b> Geotechnology, LLC		<b>Samples on:</b> <input type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE    NA °C    LTG# _____	
<b>Address:</b> 11816 Lackland Road		<b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>	
<b>City / State / Zip</b> St. Louis, MO 63146		<b>Lab Notes</b>	
<b>Contact:</b> Brad Lohrum	<b>Phone:</b> (314) 997-7440	<b>Client Comments:</b>	
<b>E-Mail:</b> blohrum@teamues.com	<b>Fax:</b> _____		

Are these samples known to be involved in litigation? If yes, a surcharge will apply    ☐ Yes    ☒ No

Are these samples known to be hazardous?    ☐ Yes    ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.    ☐ Yes    ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																							
J044517.01		Brad Lohrum		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																			
<b>Results Requested</b>		<b>Billing Instructions</b>		# and Type of Containers																									
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																		
<b>Lab Use Only</b>	<b>Sample Identification</b>	<b>Date/Time Sampled</b>																											
24011317-	GMS - 94	1/16/24 1:17	1								X										X								
002	GMS - 95	+	1								X										X								
003	96	1:18	1								X										X								
004	97	+	1								X										X								
005	98	1:19	1								X										X								
006	99	+	1								X										X								
007	100	1:20	1								X										X								
008	101	+	1								X										X								
009	102	1:22	1								X										X								
010	+ 103	+	1								X										X								

<b>Relinquished By</b>		<b>Date/Time</b>	<b>Received By</b>		<b>Date/Time</b>
Brad Lohrum		1/18/24	[Signature]		1/18/24
K.J. [Signature]		1/19/24 10:00	[Signature]		1/19/24 1000

BottleOrder: 80481





pg. 61 of 74 Work order # 24011317

<b>Client:</b> Geotechnology, LLC		<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE    °C    LTG#	
<b>Address:</b> 11816 Lackland Road		<b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>	
<b>City / State / Zip:</b> St. Louis, MO 63146		<b>Lab Notes</b>	
<b>Contact:</b> Brad Lohrum	<b>Phone:</b> (314) 997-7440	<b>Client Comments:</b>	
<b>E-Mail:</b> blohrum@teamues.com	<b>Fax:</b>		

Are these samples known to be involved in litigation? If yes, a surcharge will apply    ☐ Yes    ☒ No  
 Are these samples known to be hazardous?    ☐ Yes    ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.    ☐ Yes    ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																						
J044517.01		Brad Lohrum		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																		
Results Requested		Billing Instructions	# and Type of Containers																									
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge)			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																		
<input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)																												
Lab Use Only	Sample Identification	Date/Time Sampled																										
24011317-011	GMS-104	1/16/24 1:22	1								X																	
012	GMS-105	1:26	1								X																	
013	106	+	1								X																	
014	107	+	1								X																	
015	108	1:26	1								X																	
016	109	+	1								X																	
017	110	1:28	1								X																	
018	111	+	1								X																	
019	112	+	1								X																	
020	RBE-01	1:52	1								X																	

Relinquished By		Date/Time	Received By		Date/Time
[Signature]		1/18/24	[Signature]		1/18/24
[Signature]		1/19/24 10:00	[Signature]		1/19/24 1000

BottleOrder: 80481



# CHAIN OF CUSTODY

pg. 62 of 74 Work order # 24011317

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

**Client:** Geotechnology, LLC  
**Address:** 11816 Lackland Road  
**City / State / Zip:** St. Louis, MO 63146  
**Contact:** Brad Lohrum **Phone:** (314) 997-7440  
**E-Mail:** blohrum@teamues.com **Fax:**

**Samples on:** ☒ ICE ☒ BLUE ICE ☒ NO ICE ☐ °C ☐ LTG#  
**Preserved in:** ☒ LAB ☒ FIELD **FOR LAB USE ONLY**  
**Lab Notes**

**Client Comments:**

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																																			
J044517.01		Brad Lohrum																																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8																	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous																													
Lab Use Only	Sample Identification	Date/Time Sampled																																							
24011317 04	RBE-02	1/16/24 1:55	1										X																												
022	RBE-03	+	1										X																												
023	04	1:57	1										X																												
024	05	1:58	1										X																												
025	06	1:59	1										X																												
026	07	2:00	1										X																												
027	08	2:02	1										X																												
028	09		1										X																												
029	10		1										X																												
030	11		1										X																												

Relinquished By		Date/Time	Received By		Date/Time
Brad Lohrum		1/18/24	B. Lohrum		1/18/24
B. Lohrum		1/19/24 10:00	Amur		1/19/24 1000

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



pg. 63 of 74    Work order # 24011317

<b>Client:</b> Geotechnology, LLC		<b>Samples on:</b> <input checked="" type="checkbox"/> ICE <input checked="" type="checkbox"/> BLUE ICE <input checked="" type="checkbox"/> NO ICE    °C    LTG#	
<b>Address:</b> 11816 Lackland Road		<b>Preserved in:</b> <input checked="" type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>	
<b>City / State / Zip:</b> St. Louis, MO 63146		<b>Lab Notes</b>	
<b>Contact:</b> Brad Lohrum	<b>Phone:</b> (314) 997-7440	<b>Client Comments:</b>	
<b>E-Mail:</b> blohrum@teamues.com	<b>Fax:</b>		

Are these samples known to be involved in litigation? If yes, a surcharge will apply    ☐ Yes    ☒ No

Are these samples known to be hazardous?    ☐ Yes    ☒ No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section.    ☐ Yes    ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																						
J044517.01		Brad Lohrum		Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	DW - Lead E200.8																		
Results Requested		Billing Instructions	# and Type of Containers																									
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge)			UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER																		
<input type="checkbox"/> Other _____ <input type="checkbox"/> 3 Day (50% Surcharge)																												
Lab Use Only	Sample Identification	Date/Time Sampled																										
24011317	RBE-12	1/16/24 2:03	1								X																	
032	RBE-13	2:06	1								X																	
033	14	↓	1								X																	
034	15	↓	1								X																	
035	16	2:07	1								X																	
036	17	2:08	1								X																	
037	18	2:08	1								X																	
038	19	2:09	1								X																	
039	20	2:10	1								X																	
040	21	2:11	1								X																	

Relinquished By		Date/Time	Received By		Date/Time
[Signature]		1/18/24	[Signature]		1/18/24
Kj [Signature]		1/19/24 10:00	[Signature]		1/19/24 1000

BottleOrder: 80481



# CHAIN OF CUSTODY

pg. 64 of 74 Work order # 24011317

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

**Client:** Geotechnology, LLC  
**Address:** 11816 Lackland Road  
**City / State / Zip:** St. Louis, MO 63146  
**Contact:** Brad Lohrum **Phone:** (314) 997-7440  
**E-Mail:** blohrum@teamues.com **Fax:**

**Samples on:** ☒ ICE ☒ BLUE ICE ☒ NO ICE °C LTG#  
**Preserved in:** ☒ LAB ☒ FIELD **FOR LAB USE ONLY**  
**Lab Notes**

Client Comments:

Are these samples known to be involved in litigation? If yes, a surcharge will apply ☐ Yes ☒ No  
 Are these samples known to be hazardous? ☐ Yes ☒ No  
 Are there any required reporting limits to be met on the requested analysis? If yes, please provide limits in the comment section. ☐ Yes ☒ No

Project Name/Number		Sample Collector's Name		MATRIX		INDICATE ANALYSIS REQUESTED																			
J044517.01		Brad Lohrum																							
Results Requested		Billing Instructions		# and Type of Containers										Drinking Water		Soil		Sludge		Special Waste		Groundwater		DW - Lead E200.8	
<input checked="" type="checkbox"/> Standard <input type="checkbox"/> 1-2 Day (100% Surcharge) <input type="checkbox"/> Other <input type="checkbox"/> 3 Day (50% Surcharge)				UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER														
Lab Use Only	Sample Identification	Date/Time Sampled																							
24011317	RBE-22	1/16/24 2:11	1																						
042	RBE-23	+	1																						
043	24	2:12	1																						
044	25	+	1																						
045	26	2:13	1																						
046	27	2:14	1																						
047	28	2:17	1																						
048	29	2:18	1																						
049	30	2:19	1																						
050	31	2:20	1																						

Relinquished By		Date/Time	Received By		Date/Time
Brad Lohrum		1/18/24	R. J. Lohrum		1/18/24
1/18/24		1/18/24 10:00	Amur		1/19/24 1000

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client. See [www.teklabinc.com](http://www.teklabinc.com) for terms and conditions.

BottleOrder: 80481



pg. 65 of 74      Work order # 24011317

<b>Client:</b> <u>Geotechnology, LLC</u>		<b>Samples on:</b> <input type="checkbox"/> ICE <input type="checkbox"/> BLUE ICE <input type="checkbox"/> NO ICE <u>      </u> °C <b>LTG#</b> <u>      </u>	
<b>Address:</b> <u>11816 Lackland Road</u>		<b>Preserved in:</b> <input type="checkbox"/> LAB <input type="checkbox"/> FIELD <b><u>FOR LAB USE ONLY</u></b>	
<b>City / State / Zip</b> <u>St. Louis, MO 63146</u>		<b>Lab Notes</b>	
<b>Contact:</b> <u>Brad Lohrum</u>	<b>Phone:</b> <u>(314) 997-7440</u>		
<b>E-Mail:</b> <u>blohrum@teamues.com</u>	<b>Fax:</b> <u>      </u>	<b>Client Comments:</b>	

[illegible]

BottleOrder: 80481





## **APPENDIX D**

### **LIMITATIONS OF REPORT**

## **ENVIRONMENTAL SAMPLING LIMITATIONS OF REPORT**

1. The Report has been prepared on behalf of and for the exclusive use of the addressee, solely for use in documenting specific sample results. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of UES.
2. The sampling was performed in accordance with generally accepted practices of other consultants undertaking similar projects at the same time and in the same geographical area, and UES endeavored to observe that degree of care and skill ordinarily exercised by other consultants under similar circumstances and conditions. The findings and conclusions stated herein must be considered not as scientific certainties, but rather as professional opinions concerning the significance of the limited data gathered during the course of the project. UES does not and cannot represent that the site contains no hazardous waste or material, or other latent condition beyond that observed by UES.
3. In the event that information is developed relative to environmental or hazardous waste or material issues at the site and not contained in this report, such information shall be brought to UES' attention. UES will evaluate such information and, based on this evaluation, may modify the conclusions stated in this Report.
4. The conclusions and recommendations contained in this Report are based in part upon the data obtained from a limited number of water samples. The identified presence of contaminated water is limited to the extent that they could be identified by instrumentation and sampling and testing. There is a potential for contaminated water above the indicated concentrations to occur elsewhere on the site. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, and/or if changes are made in regulations, it will be necessary to reevaluate the conclusions and recommendations of this report.
5. If quantitative laboratory testing was performed as part of the assessment by an outside laboratory, UES has relied upon the data provided, and has not conducted an independent evaluation of the reliability to these data.
6. Chemical analyses have been performed for specific parameters during the course of this sampling as described in the text. Do not assume that a given analyte is not present at the site simply because it was not present at the test locations. The analyte may exist on the site where tests were not performed. In addition, it should be noted that additional chemical constituents not tested for during the sampling could be present in water at the site.